



Help Your Child to Pass 2021



Subject Guidance for

Design & Manufacture (National 5)

Key Skills and Techniques to practice

For Design Unit Folio and Design Assignment:

- **Idea Generation:** Use a range of idea generation techniques to help generate a wide range of initial Ideas – Sketch Modelling, sketching, Brain storming, morphological analysis, analogy / bio-mimcry. Remember: initial ideas don't have to be perfect! Initial ideas should be done quickly.
- **Development:**
 - Exploration of Initial Ideas: Have alternatives to your initial idea – Add / Remove / Combine ideas / Change the shape / Add Symmetry. (This areas is worth the most marks in your assignment!)
 - Refinement of developed idea: How is your explored idea going to be made? Decisions on Materials, sizes, assembly and manufacturing processes need to be made on this page of your folio
- **Annotation:** Always discuss and add information to all your folio pages. Refer to the specification, discuss design factors, evaluate ideas and changes as you progress. Annotation should be on every single page!
- **Sketch:** Practice sketching. To build up you sketching / drawing ability sketch. Sketch ANYTHING and everything and your skills will Improve.

For Materials And Manufacturing:

- Always take care when measuring and cutting in within the workshop (Measure twice, cut once!)
- Work hard and do not rush projects.
- Always revise proper terminology of tools and equipment. Tenon Saw, Bevelled edge chisel, G-cramp, etc..

Key Points to remember

Look at the Traffic light sheet (attached) and tick things off that you understand. The SQA can only ask you information about the content on this sheet... So go for it.

Golden Rules/exam tips/points to remember/any other specific information you think would be useful including web resources/apps

National 5 Course award: 180 marks available in total

- 55 marks for Design Folio
- 45 marks for Practical Model
- 80 marks For Written Exam

For the Exam: Tuesday 10th of May 2022 @ 09:00 – 10:45

- Unless the question says “state”, never simply answer questions with one word. Always answer in at least a sentence.
- Always refer to the question / topic area the question is discussing. Avoid generic statements. For example:
 - “Acrylic would be suitable.” (No marks awarded)
 - “Acrylic would be a suitable plastic for the picture frame as it is a thermoplastic which can be recycled widely.” (1 Mark Awarded)
- Read the questions carefully. Have you answered the question effectively?
- Avoid going around in circles, get to the point!
- Preparation is key. Make time to study all Design & Manufacture topic areas throughout the school year.

Helpful Websites

www.technologystudent.com

BBC Bitesize Nat 5 D&M: <https://www.bbc.co.uk/bitesize/subjects/z6xpb9q>